KDHE UNCOVERS BURIED ANHYDROUS AMMONIA TANK

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KDHE Spills and Meth Lab Programs

The Kansas Department of Health and Environment (KDHE) has operated a statewide Clandestine Laboratory Cleanup Program since 1999 to ensure the protection of human health and the environment by cleaning up methamphetamine (meth) labs and meth related sites. Meth labs have the potential to contaminate drinking water supplies, soil, air, and interior spaces of buildings. Meth labs are highly explosive causing a great danger to nearby residences. The health effects of clandestine laboratories include respiratory illness, skin and eye irritation, headaches, nausea and dizziness. KDHE cleans up meth labs to ensure the safety of the citizens and to protect the natural resources of Kansas.

One of the ingredients for making meth is anhydrous ammonia. Anhydrous is commonly used as a fertilizer and is stored in 1,000-gallon nurse tanks and sold through farmer's cooperatives.

A typical nurse tank used to store 1,000 gallons of ammonia.

Anhydrous ammonia is a common cause of chemical injuries. Most injuries are the result of accidental exposure, frequently in the course of work. Exposure to anhydrous ammonia may produce serious injury to the eyes, skin, respiratory system, and internal organs. Anhydrous ammonia is caustic and causes severe chemical burns. Body tissues that contain a high percentage of water, such as the eyes, skin, and respiratory tract, are very easily burned. Victims exposed to even small amounts of anhydrous ammonia require immediate treatment with large quantities of water to minimize the damage. Anhydrous ammonia is also corrosive to certain metals, such as copper and zinc, and their alloys.

Program staff has stated for a long time that some day law enforcement agencies are going to find a perpetrator that has stolen and buried a full anhydrous ammonia tank for the purposes of storing, selling and using the anhydrous ammonia for producing meth. One night in September the prediction came true. A sheriff's deputy in Cowley County arrested a man who eventually led the deputy to a remote location where a nurse tank was buried. From the photos taken at the scene it was obvious this tank would have been difficult to locate by anyone who did not know its exact location.

The tank was buried in a tree line with only the valves exposed. The liquid line valve on the tank was leaking. The crew was cautious

KDHE crews prepare the tank for safe transfer to a new storage container.

because the tank might have had further damage. The response crew donned appropriate personal protective equipment and began to assemble the equipment to transfer the anhydrous ammonia to an empty tank loaned from the Winfield Co-op. With the help from the Winfield Fire Department who supplied water and standby fire and rescue services the crew began the transfer of the anhydrous ammonia to the new nurse tank.

The response crew transferred about 600 gallons of liquid anhydrous ammonia from the buried tank to the new tank. Later, the crew used excavation equipment to dig up the buried tank.

Once that damaged tank was on a trailer, the crew moved it to Winfield where it was washed to see if any identifying marks remained on the tank. This operation took two days to complete because of the remoteness of the site and the high degree of risk to personnel. Staff returned the anhydrous ammonia to the Winfield Co-op where it will be used for its intended purpose.

KDHE crews safely transferred 600 gallons of ammonia and sent this tank to Winfield for proper use and distribution.

Severe soil and groundwater contamination could have occurred if this buried 1,000-gallon tank had burst.

The Clandestine Lab Program continues to provide the state of Kansas with the capacity to properly reclaim dangerous chemicals and protect the soil, air and waters of the state. Additionally, the program provides an effective way to protect human health by removing dangerous hazards that could have caused death to someone that had come across the tank and opened the damaged valve out of curiosity. If this tank would have failed and released the 600 gallons of anhydrous ammonia to the soil and groundwater, a large area of groundwater could have been contaminated with nitrates. KDHE was able to avoid this potential contamination by this quick and effective removal, thus, protecting the area residents that might have been impacted.

See the program Web site at http://www.kdhe.state.ks.us/methlabs for further information on the program or meth, or give the program staff a phone call at 785-368-7301 for further information.